

Appl. No. 09/693,709  
Amdt. dated Mar. 4, 2004  
Amendment to Office action of Feb. 18, 2004

### **REMARKS**

In the 2/18/04 Office action, pending claims 1-9 and 40-46 were rejected. With this Amendment, claim 43 is cancelled, claim 40 is amended and new claim 47 is added.

On page 2 of the Office action, claims 1, 6-8, 40, 45 and 46 were rejected under 35 U.S.C. 102(e) as being anticipated by Dishman et al. (US 6,181,450). The Examiner asserts that the system of Dishman includes a plurality of programmable modulators, citing modulators 24 shown in FIG. 1A. Applicant submits that Dishman nowhere discloses that the modulators 24 are programmable, as is called for in claim 1. For this and other reasons, Applicant submits that claim 1, and all claims depending therefrom, are not anticipated by Dishman. The Examiner also asserts that the band pass filters 30 of Dishman are also programmable. Applicant also asserts that the band pass filters 30 of Dishman are nowhere described as being programmable, as is claimed in dependent claim 7.

Claim 40 is amended herewith to include the operation of "adaptively controlling the type of modulation that is applied to each portion of the digital signal." This limitation is taken from dependent claim 43, which is cancelled herewith accordingly. Dishman does not disclose this aspect of the present invention. Therefore Applicant submits that claim 40 as amended is not anticipated by Dishman.

On page 3 of the Office action, claims 1-9 and 45-46 were rejected under 35 U.S.C. 103(e) as being unpatentable over Serfaty (GB 2271693). The Examiner asserts that the system of Serfaty includes a plurality of programmable modulators, citing the QAM (Quadrature Amplitude Modulation) modulators shown in FIG. 1. Applicant submits that Serfaty nowhere discloses that the QAM modulators are programmable, as is called for in claim 1. Therefore, Applicant submits that claim 1 is not obvious in view of Serfaty. Additionally, the Examiner acknowledges that Serfaty does not disclose bandpass filters, but argues that it would have been obvious to one of skill in the art to replace the PSF filters (Pulse Shaping Filters) of Serfaty with bandpass filters, asserting that bandpass filters and pulse shaping filters are functionally

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equivalent. Applicant submits that bandpass filters and pulse shaping filters are not at all functionally equivalent. For these and other reasons, Applicant submits that claim 1, and all claims depending therefrom, are not obvious in view of Serfaty.

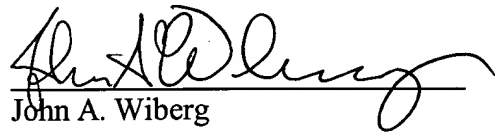
Applicant submits that claim 40 as amended is not obvious in view of Serfaty for the reasons laid out above with respect to claim 1.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and allowance of claims 1-9 and 40-47.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,



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